
December 14, 2021

Marlene H. Dortch
Secretary
Federal Communications Commission
45 L Street, NE
Washington, DC 20554

Re: WT Docket No. 21-282, Waiver Request of Gogo Business Aviation LLC

Dear Secretary Dortch:

As addressed more fully below, NPSTC submits this letter to update its previous comments in response to the Public Notice regarding the request by Gogo Business Aviation LLC (Gogo BA) for waiver of the 800 MHz air-ground service power measurement rule.¹ Specifically, IF the Commission attaches our recommended conditions to the waiver as addressed herein, NPSTC will remove its objection to the Gogo waiver.

The National Public Safety Telecommunications Council (NPSTC) is a federation of public safety organizations whose mission is to improve public safety communications and interoperability through collaborative leadership. NPSTC pursues the role of resource and advocate for public safety organizations in the United States on matters relating to public safety telecommunications. Accordingly, NPSTC provides guidance on issues that can either negatively impact or benefit the operation of public safety communications.

¹ *Public Notice*, DA 21-796, WT Docket No. 21-282 released July 7, 2021.

Gogo BA ground-to-air transmissions at 849-851 MHz are directly adjacent to public safety mission critical narrowband systems at 806-809/851-854 MHz, where portables, mobiles and control stations receive in the 851-854 MHz band segment. In its original comments, NPSTC did not support grant of the waiver request because potential interference to public safety 800 MHz operations had not been adequately addressed in the waiver request.

A growing issue of concern for public safety as spectrum becomes more heavily used is the presence of “ghost” interference. That is, public safety experiences harmful interference but the source of the interference is not readily known. Even after scarce resources are expended to investigate the interference, the source of the problem may not be apparent. Therefore, it is important to minimize the potential for interference up-front and to incorporate provisions that help the public safety community to identify the source of any interference that does occur.

The record also includes concerns regarding potential interference to critical infrastructure (CII) operations in the 896-901/935-940 MHz (900 MHz) band.² Florida Power and Light noted the critical nature of its operations at 900 MHz:

FPL uses its 900 MHz private land mobile radio system for dispatch communications associated with electrical service restoration and maintenance including emergency notifications and disaster recovery communications; voice communications for nuclear power plant security operations; smart grid energy efficiency monitoring; and electric distribution system controls.³

² See Reply Comments of Florida Power and Light Company, August 23, 2021; Opposition of Motorola Solutions, Inc., August 6, 2021; and Reply of Motorola Solutions, Inc., August 26, 2021.

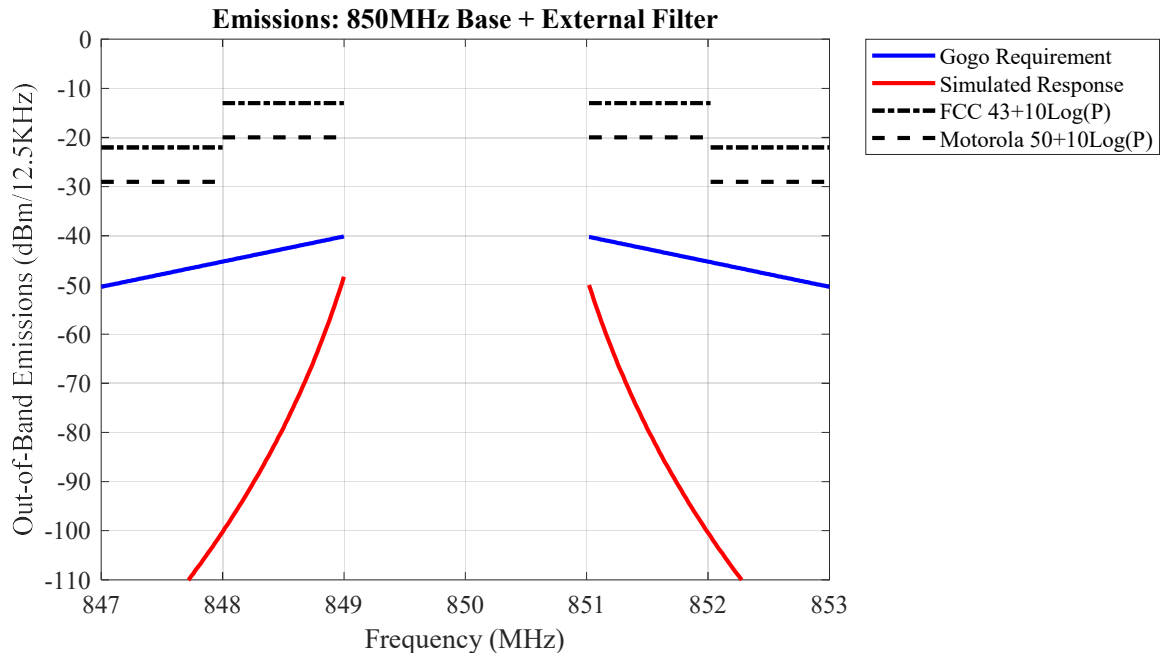
³ See Reply Comments of Florida Power and Light Company at page 1.

While public safety does not operate communications systems in the 900 MHz band, potential interference to CII operations such as those of FPL could negatively impact public safety emergency operations as well.

Following the comment period, Gogo BA representatives reached out to NPSTC on two teleconference calls to discuss the issue, and has provided additional information. As a result of the first call, Gogo BA provided NPSTC with a list of its ground-based station site locations under a non-disclosure agreement. Gogo BA also provided NPSTC with a 24/7 contact number in case any issues arise.

A second call was held November 18, 2021 among Gogo, BA and the NPSTC Governing Board Members, in which Gogo shared more detailed technical information that would have an impact on any potential for interference. Gogo BA's energy into the directly adjacent 800 MHz public safety band is a critical factor in assessing the interference potential. Gogo provided NPSTC Governing Board Members with a chart (see next page) that shows the emission mask it plans to meet, relative to the standard Commission mask and to a mask that Motorola Solutions, Inc. recommended that was drawn from a more stringent mask the Commission adopted for 900 MHz broadband operations.⁴ Gogo advised NPSTC that it plans to meet stringent out of band emission requirements for its 4G ATG solution that go well beyond Commission and Motorola recommended thresholds.

⁴ See 47 CFR 27.1509(b)



NPSTC has reviewed the Gogo BA site list, emission mask information and 24/7 point of contact information Gogo BA has provided. **IF** the Commission places the following conditions on the Gogo BA requested waiver grant, NPSTC withdraws its objection to the grant:

- 1) Gogo BA must attenuate emissions into the 851-854 MHz public safety band by at least $50 + 10\text{Log}(P)$ dB;
- 2) Gogo BA must incorporate some means of identification of its signal so the source of any interference can be readily determined; [to combat instances of “ghost” interference discussed above.]
- 3) Gogo BA must maintain a 24/7 contact number public safety can use to report any instances of interference;
- 4) Gogo must address any reports of interference by public safety immediately;
- 5) Gogo must mitigate reported interference by taking all steps necessary to resolve the matter to the satisfaction of the reporting public safety agency; and
- 6) Gogo must immediately vacate operation on the channel(s) causing interference until the solution is agreed to by the public safety agency reporting the interference.

NPSTC also recommends the Commission consider similar conditions with respect to protecting the 900 MHz band, to avoid interference to critical infrastructure (CII) licensees.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ralph A. Haller", written over a horizontal line.

Ralph A. Haller, Chairman

National Public Safety Telecommunications Council